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Bodies and populations – life optimisation in Vietnam

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Abstract

Vietnam has been described by many commentators as being about two decades 'behind' many of its East Asian neighbours in terms of economic and social development, although a series of economic reforms initiated in 1986 under a banner of *đổi mới* (renovation) are credited with closing the gap. At the same time, as has been the case in many other socialist countries, science and technology in Vietnam have been seen as central forces for national development, progress and health. Although molecular biology and genetics (especially in agricultural but also medical fields) have come to play an important role in successive government-sponsored science and technology programmes since the mid 1990s, Vietnam is not considered to be one of Asia's 'emerging biotech giants'. By analysing national efforts to revive traditional medicine in Vietnam, I propose in this paper to empirically restore the concept of bio-politics as one of the poles of a bio-power that continues to administer, optimise and multiply human vitality. I will show how a national effort to revive traditional medicine has been both bio-political (when contributing to the improvement of 'population health') and a case of bio-nationalism (when contributing to the 'building of national culture').

Key words

Bio-politics, life optimisation, Vietnam, population, traditional medicine

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Introduction

On the 23rd of February 2005, the Central Committee of the Communist Party of Vietnam delivered its verdict “on the protection, care and promotion of people’s health in the new situation”:

Over the past 10 years, the protection of and care for people’s health in our country has continued to obtain important achievements. The health network, particularly at the grass-roots level has seen constant consolidation and growth; many dangerous epidemics have been contained and controlled; health services have been increasingly diversified; new technologies have been studied and applied; more progress has been made in the supply of pharmaceuticals and medical equipment; health insurance has taken shape and begun to show its effectiveness; people in almost all localities have received better healthcare. Most of the general health indicators of our country surpass other countries with the same per capita income. (Vietnam. Communist Party of Vietnam. 2005)

The Party is not alone in its analysis, as only a few years earlier, the World Health Organisation had commended Vietnam in a similar vein:

Although [Vietnam] is among the poorest in the world, its vital health indicators are comparable to those of middle-income countries. Life expectancy for instance is 10 years longer for Vietnamese women than would be expected given the country’s level of development. Infant mortality (36.7 per 1000 live births) is at the same level as countries such as Brazil, Algeria and Turkey. Viet Nam has been highly successful long before Alma Ata (1978) in providing preventive health services, in controlling the spread of communicable diseases and in achieving good health for its population. (WHO 2003: 2)

Although science and technology (as has been the case in many other socialist countries) have long been considered central “forces for national development, social progress, human civilization and better life” (Vietnamese Academy of Science and Technology 2007), Vietnam is not considered to be one of Asia’s ‘emerging biotech giants’ on a par with China, South Korea, India or Singapore. It is certainly the case that molecular biology and genetics (especially in agricultural but also medical fields) have, since the mid 1990s, come to play an increasingly important role in successive government-sponsored science and technology programmes such as Decree 18 on the “Development of Biotechnology in Vietnam until 2010” (Nguyen 2004), but it cannot be argued that they have figured prominently in hitherto efforts (by a plethora of central state organs, local government authorities, health workers,

traditional practitioners, non-governmental organisations, aid agencies, etc.) to increase life expectancy, reduce infant mortality, contain communicable diseases, treat chronic diseases and improve quality of life in Vietnam.

One of the key contentions in recent writings on contemporary configurations of bio-power and bio-politics has been that we are in the midst of a shift. The notions of vitality circulating in the quarantine strategies, population theories and clinical gaze of 18th century Europe that Michel Foucault (1973; 1977; 1978) analysed, have mutated. An ‘old’ biology has been replaced by a ‘new’ molecular biology which has “shifted its interest to individual genes” (Gottweis 1998: 7). Today, “the clinical gaze has been supplemented, if not supplanted, by [a] molecular gaze” (Rose 2006: 12) as the molar body – made up of limbs, organs, muscles and blood – comes to be investigated, mapped out and manipulated at cellular and molecular levels, and human “vitality can now be decomposed, stabilized, frozen, banked, stored, commoditized, accumulated, exchanged, traded across time, across space, across organs and species, across diverse contexts and enterprises in the service of both health and wealth” (Rose 2007: 3; see also Waldbry and Mitchell 2006). As put by Sarah Franklin in an analysis of somatic cell nuclear transfer technology, “if we are not yet in the age of ‘biological control’... in which, in effect, nothing is ‘biologically impossible’... life is nonetheless substantially altered after Dolly” (Franklin 2005: 66, 67).

It is striking to note how much of the recent work that has drawn upon and developed Foucault’s concepts of bio-power and bio-politics has been empirically focused on those practices emerging from advanced life sciences (see, for example, Cooper 2008; Gibbon and Novas 2008; Rabinow 1996; Rose 2006; Rabinow and Rose 2006; Sunder Rajan 2006).¹ According to Paul Rabinow these constitute “the most potent present site of new knowledges and powers” (Rabinow 1999: 51). And with numerous reports pointing to “Asia’s Rising Science and Technology Strength” (National

¹ As Lemke (2009) has discussed, the take up and development of Foucault’s brief writings about bio-power and bio-politics in recent years might be broadly divided into two fields: political philosophy/theory (e.g. Agamben 1998; Esposito 2008, Hardt & Negri 2001) and social studies of science. It is with the latter field of social research that I am engaging in this article.

Science Foundation 2007) or warning that “the challenge to Western pre-eminence in stem cell science from China, Singapore, and South Korea is real” (Department of Trade and Industry 2005), scholars have begun focusing on how advanced life sciences are transforming bio-politics in Asia today as well as generating new forms of cultural politics and bio-nationalism (Bharadwaj 2008; Bharadwaj & Glasner 2008; Gottweis 2009; Gottweis, et al. 2009; Salter, et al. 2006; Sleeboom-Faulkner 2009; Sunder Rajan 2006). Indeed much of the discussion in this special issue on ‘bio-politics in Asia’ focuses on advanced biotechnologies.

Yet, where does such an empirical focus on advanced life sciences in analyses of bio-politics in Asia (and elsewhere) today leave a country like Vietnam? In this paper, I propose to restore the concept of bio-politics as one of the poles of a bio-power that continues to administer, regulate, optimise and multiply life. I will argue that molar bodies and populations remain as crucial as molecules, cells and genomes as objects of life optimisation, and in particular that bio-politics remains a technology of power “addressed to a multiplicity of men, not to the extent that they are nothing more than their individual bodies, but to the extent that they form, on the contrary, a global mass that is affected by overall processes characteristic of birth, death, production, illness, and so on” (Foucault, et al. 2003: 244). It is the *collective vitality of a population* that is at stake in bio-political regularising technologies.

I will also argue that ‘bio-nationalism’ is not something unique to recent global developments in and around advanced life sciences. Gottweis (2009) has suggested that in the midst of the Hwang Woo Suk scandal in South Korea, a new form of bio-nationalism which invoked the transformative potentials of stem cells and oocytes displaced more traditional forms of ‘blood-related’ ethnic nationalism. In this sense, bio-nationalism is something that has emerged out of global biotechnological competition to harness the vitality of gametes, cell lines, tissues and organs in the service of nation states – to

improve people's health and to invigorate national economies.² I will make a broader case, suggesting that bio-nationalism relates to different forms of practice which aim at strengthening the collective vitality of a nation state – as regards its population, culture, economy and ecology – *as a matter of competition*. As such, past eugenic programmes to improve population quality in Asia and Europe (Rose 2007: 62), selective immigration practices in Australia (Kelly 2004: 63-4) or 'new public health' campaigns aimed at promoting healthy lifestyles (Osborne 1997) can also be seen as invoking certain forms of bio-nationalism when they aim to improve the *collective* vitality or vigour of a nation as compared to other nations.³

Vietnam's national vital health indicator 'achievements' with which I started this paper have been attributed to the development of an extensive primary healthcare delivery network made up of almost 10,000 health centres at the commune level and 600 district-level hospitals,⁴ national vaccination efforts like the Expanded Programme on Immunization, hygiene campaigns as well as a national programme to revive and encourage use of traditional medicine (WHO 2003). In the following, I will focus on the latter showing how traditional medicine has been mobilised since the 1950s, on the one hand, for "the protection of the people's health" and on the other, for "the building of national culture" (Nguyen 1965: 22).

Renovating traditional medicine

From its beginnings in the 1950s, Vietnam's efforts to revive and renovate traditional medicine in order to combine it with modern medicine has been a scientific one involving not only state-led organisations, but also traditional

² Fuchigami has also argued that Hwang Woo Suk's unethical procurement of "a huge quantity of ova for research purposes in Korean stem-cell studies was caused by a bio-nationalism, which hopes to have Korea jump up the top of the world in bio-technology by succeeding to establish 'Nuclear Transfer – human Embryonic Stem Cells'" (2006: 161). Sharma and Swarup have argued that "India is a country rich in biodiversity... and has a strong base of expertise available in nearly all fields – thus biotechnology could flourish leading to a Bioindustrial Revolution. We are today poised to be the leaders in the field in the 21st century" (2003: 1). And Gottweis et al. have discussed how in the context of induced pluripotent stem cells, the Japanese government "hopes Japan will become a world leader in regenerative science using iPS cells" (2009: 188).

³ Here I agree with Kelly who argues that bio-nationalism can be thought of as "a nationalism which is precisely the prejudice in favour of the nation *qua* population, *qua* biopolitical entity" (2004: 64), although I would add economy, culture and ecology (i.e. a nation's 'biological resources' and 'bio-diversity') as additional vital elements.

⁴ Vietnam (population 80 million) is administratively divided into 61 provinces, 500 districts and approximately 8,850 communes.

practitioners, local healthcare promoters, village elders and farmers (Wahlberg 2006; 2007; 2008). As argued by Nguyễn Văn Hương, the first Director of the Institute of Traditional Medicine in Hanoi: “With modern scientific conceptions, we shall eliminate all the unscientific outgrowth which the feudal regime superadded to traditional medicine, thus turning it into something esoteric” (Nguyen 1965: 28). He goes on to suggest that “on a modern scientific basis, traditional medical experiences will have to be justified by clinical research and laboratory experiments, which will enable us to master the laws which constitute their internal logic” (ibid.).

This scientific approach – in the laboratory, clinic and countryside – has characterised 50 years of concrete efforts to integrate traditional medicine into organised national health delivery Vietnam. It has been a three-pronged approach focusing on the modernisation of its production, the regulation of its practice and the promotion of its rational use “in favour of population health” (Hoàng 2004; see Wahlberg 2006).

Throughout the last five decades, concerns have been voiced by health officials of the Democratic Republic of Vietnam that especially rural people “trusted sorcerers and quacks” (Vu 1965: 78) and that they “seek the services of charlatans [*lang băm*], sorcerers [*thầy pháp*], magicians [*pháp sư*], etc.” when falling ill (Vietnam. Ministry of Health 2006). To counteract this, teams of ethno-botanists, pharmacologists and chemists have travelled to rural parts of the country to collect and document remedies that have been developed and used by traditional practitioners, often passed down from generation to generation (Do and Nguyen 1991). Plants used traditionally for medicinal purposes have been botanically taxonomised, chemically characterised and pharmacologically analysed for bio-activity.⁵

Using the findings of these scientists, the Ministry of Health has identified essential medicinal plants known for their use in the treatment of rural ailments such as cough, diarrhoea, influenza, headache and dysentery, and

⁵ Van Esterik has argued that “the Socialist search for proving the efficacy of the people’s wisdom [in Vietnam] underlies the approach to herbal therapies, as traditional medicine is stripped of ‘superstitious’ beliefs” (1988: 757)

encouraged commune-level healthcare stations to grow them in plant gardens:

The health service has coordinated with the Eastern Medicine Society in propagating and mobilizing people to grow and use medicinal plants available in localities as well as simple prescriptions to prevent and self-treat a number of common diseases, positively contributing to not only the realization of the strategy on people's health care and protection but also to the implementation of programs on hunger elimination, poverty reduction as well as environmental improvement. (Vietnam. Ministry of Health. 2003)

At the same time, as is the case in many other South East Asian countries, following two decades of rapid economic growth, the government of Vietnam has identified a newer set of health problems related to what they call the "new situation" (i.e. post *đổi mới* [renovation] economic reforms which were initiated in the late 1980s): "non-infectious diseases like cardiovascular diseases, cancer, accidents and injuries, diabetes, occupational diseases, mental diseases, poisoning, suicide and diseases caused by unhealthy lifestyles (drug addiction, alcoholism, obesity, etc.)" (Vietnam. Ministry of Health. 2001). The Institute of Materia Medica, established in 1961, together with a growing number of traditional medicine companies have industrialised over 2,000 traditional remedies into tonics and capsules (compared to about 10,000 approved modern pharmaceutical products), many of which are used to treat these diseases of the 'new situation'. Traditional practitioners promote herbal remedies and forms of exercise to offset the stresses of 'modern living' (*đời sống hiện đại*), while an increasing number of remedies – e.g. for corneal ulcers, drug addiction, post-operative pain, arteriosclerosis, burns and insomnia – have been clinically tested for safety and efficacy in animals and humans through controlled trials. In this way, traditionally used medicinal plants have been directed at to the modern health needs of urban populations (Wahlberg 2007).

The point I am making here is that the ongoing revival of traditional medicine in Vietnam has relied on a diverse range of expert bodies of knowledge (from epidemiology, biomedicine, botany, phytochemistry, ethnography to pharmacology) all of which have been recruited to separate 'sorcery from

science'. A number of shortcomings in these efforts have been identified, not least the fact that in most healthcare delivery contexts traditional medicine remains considerably underfunded when compared to biomedicine (see Vietnam. Communist Party of Vietnam. 2005; Vietnam. Ministry of Health. 2003). Moreover, while traditional medicine remains a primary source of healthcare in some rural areas and an estimated 90% of people in Vietnam report using some form of traditional medicine, the increasing prevalence of and also preference for (see Craig 2004) modern medicine is reflected in the traditional medicine usage targets set in the most recent national strategy for traditional medicine: 10% at the central level, 20% at provincial level and 25% at the district level (Vietnam. Ministry of Health. 2003).⁶

Nevertheless, in post-colonial Vietnam traditional medicine has been one element – together with hygiene campaigns, nutrition projects, vaccination programmes, antibiotics, etc. – in an overall bio-political project “to reduce morbidity and mortality, promote health and increase life expectancy, improve the quality of our race [*nâng cao chất lượng dân số*]⁷ and contribute to improving the quality of life [*nâng cao chất lượng cuộc sống*] ... in response to the needs of industrialization, modernization, nation-building and defence” (Vietnam. Communist Party of Vietnam. 2005: I.2). This is a regularising bio-politics of the population in the sense that Foucault originally proposed where ‘population’ is understood and intervened upon as “a global mass that is affected by overall processes characteristic of birth, death, production, illness, and so on” (Foucault, et al. 2003: 244).

Eradicating a “national inferiority complex”

At the same time, as already noted, the renovation of traditional medicine in post-colonial Vietnam has always been about more than protecting and improving population health. It has also explicitly been a case of building

⁶ For an excellent ethnography of how traditional and modern medicine use have become inseparable in Northern Vietnam see Craig (2002: 160): “The conflicting authorities of tradition and modernity, mothers and grandmothers, self, household, and medical professional means that antibiotic consumers must negotiate a plurality of conflicting notions, locations, and positions about what constitutes ‘correct’”.

⁷ See Greenhalgh and Winckler (2005) as well as Bakken (1999) for discussions of efforts to improve population quality in China which are very similar to those in Vietnam.

national culture, a kind of reclaiming of a subjugated past. In calling for a national strategy to combine modern and traditional medicine in 1955 (a decade after Chairman Mao had done the same in China), the late President Hồ Chí Minh disparaged that “in the years of colonial domination... traditional medicine was stifled” (cited in Nguyen, et al. 1965: 27). This appeal was received by many as a kind of ‘call to arms’, especially considering the central role that traditional herbal medicine had had in Vietnam’s first war of independence against French soldiers (1949-54). As recalled by Truong Xuan Nam, a Departmental Head at the Hanoi College of Pharmacy in the 1960s:

Our technicians, pharmacists, laboratory assistants and students left the towns and went to all parts of the country wherever they were required by the needs of the war of resistance. In the forests of Viet Bac, in the Plain of Reeds in South Vietnam, on the banks of the Red River, in the highlands of the North-West Region, we set up workshops and supply stores in thatched huts and began a completely new life... [It was] during the resistance that we laid the foundations of our pharmaceutical organizations. It can be said that the first pharmaceutical factories and the first research laboratories of Vietnam came into being in the jungle. (Truong 1965: 112)

Facing harsh conditions and chronic shortages of modern medical supplies, traditional remedies and medicinal plants became especially important in these jungle laboratories:

Then, we turned to the products of our forests and fields. Thus, we gathered the leaves of *Dichroa febrifuga* to prepare an anti-malarial drug, tubers of *Stemona tuberosa* to make cough-syrup, *Stephania rotunda* to make a nerve sedative, etc. Age-old recipes learnt from ordinary peasants allowed us to produce a series of medicaments from medicinal materials in the country (Truong 1965: 111).

It is exactly these experiences from Vietnam’s jungles that are to this day invoked by those who call for courage to reject any denigration of Vietnam’s medical heritage. Phạm Ngọc Thạch, a close confidante of Hồ Chí Minh during the 1930s and 40s, and the Democratic Republic of Vietnam’s first Minister of Health argued that “to have been convinced long since of the absolute superiority of so-called western medicine, to have considered traditional medicine a superstition, and now to approach it with respect, with the desire to learn from it... needs great courage” (Pham 1965). And Nguyễn Văn Hương called for the eradication of “scepticism about the national

medical experience and about Southern [Vietnamese] medications”, a scepticism that he attributed to “a national inferiority complex caused by long years of foreign domination” (Nguyen 1965: 29-30).

A number of concrete projects have since been effected to promote such courage. The strategy, described above, of sending out scientific teams to collect and collate traditional remedies has not only been about finding medicinally useful plants, it has also been about documenting Vietnam's national heritage, especially since it is feared that “the cultural heritages created by traditional medicine and pharmacy are in danger of dying out” (Vietnam. Ministry of Health. 2003). Moreover, traditional medicine has been introduced into the curriculum of Vietnam's seven Medical Schools such that all medical students receive training in herbal medicine and acupuncture. And also, biomedical practitioners have been offered refresher courses in traditional medicine organised by local chapters of the National Association of Traditional Practitioners (see Bui 1999).

In emphasising self-sufficiency, self-reliance, self-confidence and courage, those persons involved in the renovation of traditional medicine in Vietnam have unfailingly invoked Hồ Chí Minh's call to ‘build our own medicine’ by combining modern and traditional medicine. In more recent times, this call has been reiterated by Hoàng Bảo Châu and many others in the form of a national project to develop “a medicine which is specifically Vietnamese”, adapted to the “physiological characteristics of the Vietnamese person as well as to the particularities of Vietnamese pathology” and which is not “merely a copy of Chinese traditional medicine” (Hoàng, et al. 1999: 13, 28, 1; see also Huu and Borton 2003). Not only has the national project to revive traditional medicine in Vietnam invoked a bio-politics of the population, it has also encompassed a form of bio-nationalism as the “national medical experience” is valorised as something to be confident about, proud of and strengthened in order to reclaim Vietnam's national heritage and to promote its independence. The vitality of the nation is not only linked to the people's health and a strong economy, it is also related to a robust indigenous culture.

Conclusions

With a growing focus on advanced life sciences in empirical studies of bio-politics today, whether in Asia or elsewhere, one might be led to conclude that the ‘politics’ of bio-politics refers to various contestations over what life is and how it is being molecularly intervened upon and transformed in a globally competitive context. Global bio-politics, it seems, is a politics of international stem cell science, genomics and clinical trials. However, in this paper, I have proposed to restore bio-politics as one of the poles of bio-power which takes the population as its object and problem, “a problem that is at once scientific and political; as a biological problem and as power’s problem” (Foucault, et al. 2003: 245). I have argued that analysing efforts to administer, regulate and optimise collective vitality in Vietnam today entails an empirical engagement not so much with reproductive, stem cell or genetic technologies, but more importantly with ‘old school’ programmes of public hygiene, nutrition, vaccination, traditional medicine, urban planning as well as water and sewage treatment. It is through these initiatives that the vitality – the life mechanisms – of Vietnam’s population has in recent times come to be known, worked upon, protected and perhaps even enhanced in ways that are deemed to have allowed for impressively long life expectancies, low mortality and morbidity rates as well as better ‘quality of life’, especially when compared to other countries of “comparable levels of development”.

This is not to suggest some kind of crude North-South or West-East distinction (e.g. that advanced life science technologies are relevant for the North while ‘old school’ public health technologies are relevant for the South). The point I am making is equally relevant in so-called ‘Western’ contexts. However prominent regenerative medicine and the new genetics have become in Europe and America, it would be hard to argue that practices of public health, demography, nutrition awareness campaigns or antibiotic treatment – which address molar bodies and populations – have diminished in

scope. Indeed, if anything, we are seeing novel assemblages of molar and molecular life optimisation emerging in both 'North' and 'South'.

Finally, I have also argued that bio-nationalism is not something that is somehow unique to the recent emergence of a global bio-economy in which nations compete to be at the forefront of a 'biotechnological revolution'. The recruiting of expert bodies of knowledge to regulate, administer, and optimise human vitality that characterises bio-power (and its anatomo-political and bio-political poles) has perhaps always been national in some form. One of Foucault's key arguments was that the emergence of disciplining anatomo-political technologies centred around the individual body (its capabilities, productive forces, docility and vitality) and, later regularising bio-political technologies which addressed the population as an aggregated collective, formed an indispensable part of the development of capitalist industrial societies as well as the formation of "our modernity" (1991: 103). In Vietnam, a national project to revive and renovate traditional medicine since the 1950s has been at once bio-political and bio-national as a specific part of articulated and actualised "responses to the needs of industrialization, modernization, nation-building and defence" (Vietnam. Communist Party of Vietnam. 2005).

References

- Agamben, G.** 1998. *Homo Sacer: Sovereign Power and Bare Life*, Stanford: Stanford University Press
- Bharadwaj, A.** 2008 'Bio-sociality and bio-crossings: encounters with assisted conception and embryonic stem cells in India' in Gibbon, S. & Novas, C. *Biosocialities, genetics and the social sciences : making biologies and identities*, London: Routledge.
- Bharadwaj, A. & Glasner, P.** 2008. *Local Cells, Global Science : The Rise of Embryonic Stem Cell Research in India*, London: Routledge.
- Bùi, C. H.** 1999 'Integration of Traditional Medicine Into the Health Care System', in B. C. Hoàng, Đ. T. Phó and N. Huu (eds) *Vietnamese Traditional Medicine*, Hanoi: The Gioi Publishers.
- Cooper, M.** 2008. *Life as surplus : biotechnology and capitalism in the neoliberal era*, Washington D.C.: Washington University Press
- Cooper, M. & Waldby, C.** 2007. 'The Biopolitics of Reproduction: Post-Fordist Biotechnology and Women's Clinical Labour.' *Australian Feminist Studies*.
- Craig, D.** 2002 *Familiar medicine : everyday health knowledge and practice in today's Vietnam*, Honolulu: University of Hawaii Press.
- Department of Trade and Industry** 2005 'Global Watch Mission Report: Stem cell mission to China, Singapore and South Korea', London: Department of Trade and Industry & King's College London.
- Do, T. L. and Nguyen, X. D.** 1991 'Native drugs of Vietnam: which traditional and scientific approaches?' *Journal of Ethnopharmacology* 32(1-3): 51-56.
- Esposito, R.** 2008, *Bíos: Biopolitics and Philosophy*, Minneapolis: University of Minnesota Press
- Foucault, M.** 1973 *The birth of the clinic : an archaeology of medical perception*, London: Tavistock Publications.
- 1977 *Discipline and punish : the birth of the prison*, Harmondsworth: Penguin.
- 1978 *The history of sexuality, vol. 1*, Harmondsworth: Penguin.
- 1991 'Governmentality', in G. Burchell, Colin Gordon, Peter Miller, and Michel Foucault. (ed) *The Foucault effect : studies in governmentality : with two lectures by Michel Foucault.*, London: Harvester Wheatsheaf.
- Foucault, M., Bertani, M., Fontana, A. and Macey, D.** 2003 *"Society must be defended" : lectures at the College de France, 1975-76*, London: Allen Lane.
- Franklin, S.** 2005 'Stem Cells R Us: Emergent Life Forms and the Global Biological', in A. Ong and S. Collier (eds) *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems*, Oxford: Blackwell.
- Fuchigami, K.** 2006. 'Nuclear transfer human embryonic stem-cell studies in Korea: bio-nationalism and "infertility treatment" in allegations of unethical behavior over ovum donation in the Hwang Woo Suk stem cell scandal', *Shūkyō kenkyū*, 80(349): 161-86.
- Gibbon, S. and Novas, C.** 2008. *Biosocialities, genetics and the social sciences : making biologies and identities*, London: Routledge.

- Gottweis, H.** 1998 *Governing molecules : the discursive politics of genetic engineering in Europe and the United States*, Cambridge, Mass, London: MIT Press.
- Gottweis, H.** 2009. 'Bio-nationalism in South Korea: Between stem cells and BSE', *New Genetics and Society*, in press
- Gottweis, H., Salter, B. and Waldby, C.** 2009 *The Global Politics of Human Stem Cell Science: Regenerative Medicine in Transition*, London: Palgrave.
- Hardt, M. and Negri, A.** 2001. *Empire*, Harvard: Harvard University Press-
- Lemke, T.** 2009 *Biopolitik : en introduktion*, Copenhagen: Hans Reitzels Forlag
- Hoàng, B. C.** 2004 'Promotion of herbal medicine in the rural areas of Vietnam', personal communication with former Director of Institute of Traditional Medicine (1975-95), Hanoi: 4 November 2004.
- Hoàng, B. C., Phó, Đ. T. and Huu, N.** 1999 *Vietnamese Traditional Medicine*, Hanoi: The Gioi Publishers.
- Huu, N. and Borton, L.** 2003 *Traditional Medicine : Vietnamese Culture*, Hanoi: The Gioi Publishers.
- Kelly, M.** 2004. 'Racism, Nationalism and Biopolitics: Foucault's Society Must Be Defended, 2003', *Contretemps* 4: 58-70
- National Science Foundation** 2007 'Asia's Rising Science and Technology Strength', Arlington: Division of Science Resources Statistics, National Science Foundation.
- Nguyen, V. H.** 1965 'Renovation of traditional medicine', in V. H. Nguyen, D. C. Hoang, C. Vu and P. C. Nguyen (eds) *Health Organization in the D.R.V.*, Hanoi: Xunhasaba.
- Nguyen, V. H., Hoang, D. C., Vu, C. and Nguyen, P. C.** 1965 *Health organization in the D.R.V.*, Hanoi: Xunhasaba.
- Nguyen, V. U.** 2004 'Application of biotechnology in Vietnam agriculture - an overview', *Journal of Agricultural Sciences and Technology*(4): 55-6.
- Osborne, T.** 1997. 'Of health and statecraft' in Petersen, A.R. and Bunton, R. (eds) *Foucault, health and medicine*, London: Routledge, 173-88.
- Pham, N. T.** 1965 'Interview with Doctor Pham Ngoc Thach, Minister of Health', in V. H. Nguyen, D. C. Hoang, C. Vu and P. C. Nguyen (eds) *Health Organization in the D.R.V.*, Hanoi: Xunhasaba.
- Rabinow, P.** 1999 'Artificiality and Enlightenment: From Sociobiology to Biosociality', in C. Samson (ed) *Health studies : a critical and cross-cultural reader*, Oxford, UK ; Malden, Mass.: Blackwell Publishers.
- Rabinow, P. & Rose, N.** 2006. 'Biopower today', *BioSocieties* 1(2): 195-217.
- Rose, N.** 2006 *The politics of life itself : biomedicine, power, and subjectivity in the twenty-first century*, Princeton: Princeton University Press.
- 2007 'Molecular Biopolitics, Somatic Ethics and the Spirit of Biocapital', *Social Theory and Health* 5(1): 3-29.
- Salter, B., Dickins, A. and Cooper, M.** 2006 'China and the global stem cell bioeconomy: an emerging political strategy?' *Regenerative Medicine* 1(5): 671-83.
- Sharma, M. and Swarup, R.** 2003 'The way ahead : the new technology in an old society', in Gosh, P. *Biotechnology in India*, New York: Springer.
- Sleeboom-Faulkner, M.** 2009 *Human Genetic Biobanks in Asia: Politics of Trust and Scientific Advancement*, London: Routledge.

- Sunder Rajan, K.** 2006 *Biocapital : the constitution of postgenomic life*, Durham, N.C.: Duke University Press ; Chesham : Combined Academic [distributor].
- Truong, X. N.** 1965 'Pharmacy in the D.R.V.' in V. H. Nguyen, D. C. Hoang, C. Vu and P. C. Nguyen (eds) *Health Organization in the D.R.V.*, Hanoi: Xunhasaba.
- Van Esterik, P.** 1988 'To strengthen and refresh: Herbal therapy in Southeast Asia', *Social Science & Medicine* 27(8): 751-759.
- Vietnam. Communist Party of Vietnam.** 2005 *Resolution No. 46-NQ/TW of the political bureau on the protection, care and promotion of people's health in the new situation*, 23 February 2005, Hanoi: Party Central Committee.
- Vietnam. Ministry of Health** 2006 'Some Issues on Pharmaceutical Activities at Basic Level of Health System, by Vice Minister of Health Prof. Le Van Truyen', Hanoi: Ministry of Health.
- Vietnam. Ministry of Health.** 2001 'Decision No. 35/2001/QD-TTg by the Prime Minister approving the strategy for protection and care of the people's health in the 2001 – 2010 period', 19 March 2001, Hanoi: Government of Vietnam.
- 2003 'National policy on traditional medicine 2010', Hanoi: Ministry of Health.
- Vietnamese Academy of Science and Technology** 2007 'Message from the Director General', <http://www.vast.ac.vn/english/index.asp?fcid=2&lang=1&progid=1001&staticID=13>: accessed on 15 December 2007.
- Vu, C.** 1965 'The Van Dinh Pilot Hospital', in V. H. Nguyen, D. C. Hoang, C. Vu and P. C. Nguyen (eds) *Health Organization in the D.R.V.*, Hanoi: Xunhasaba.
- Wahlberg, A.** 2006 'Bio-politics and the promotion of traditional herbal medicine in Vietnam', *health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 10(2): 123-47.
- 2007 'Modernisation and its side effects - an inquiry into the revival and renaissance of herbal medicine in Vietnam and Britain' *Sociology*, PhD Dissertation, London: London School of Economics and Political Science.
- 2008 'Pathways to plausibility - when herbs become pills', *BioSocieties* 3(1): 37-56.
- Waldby, C. and Mitchell, R.** 2006 *Tissue economies : blood, organs, and cell lines in late capitalism*, Durham ; London: Duke University Press.
- WHO** 2003 *WHO Country Cooperation Strategy 2003-06, Viet Nam*, Hanoi: WHO Viet Nam Country Office.